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NOVEMBER

1956



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Cinematographer

THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHY

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Editorial and Business Office: 1782 N. Orange St., Hollywood 28, Calif.
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ON THE COVER

CAMERA ANGLE — Director of photography Robert Fluzak, A.S.C., (with eye shade) gives a few pointers on photography to Sarah Churchill during filming of Metro-Goldwyn-Meyer's Technicolor musical, *Royal Wedding*. Director Stanley Donen, assistant director Marvin Stuart and other members of crew are interested spectators. Fluzak also shows interesting use of huge deflating tire of extra car for special lighting effect — *Photo by Robert Quirk*

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AMERICAN SOCIETY OF CINEMATOGRAPHERS

FOUNDED JANUARY 9, 1919, The American Society of Cinematographers is composed of the leading directors of photography in the Hollywood motion picture studios. Its membership also includes non-resident cinematographers and cinematographers in foreign lands. Membership is by invitation only.

The Society meets regularly once a month at its clubhouse at 1782 North Orange Drive, in the heart of Hollywood. On November 3, 1950, the Society established its monthly publication "American Cinematographer" which it continues to sponsor and which is now circulated in 46 countries throughout the world.

Dominant aims of the Society are to bring into close confederation and cooperation all leaders in the cinematographic art and science and to strive for pre-eminence in artistic perfection and scientific knowledge of the art.

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25% of the motion picture shows in theaters throughout the world are filmed with a Mitchell

Hollywood Bulletin Board



CHARLES CLARKE, A.S.C. (center, front row), in Australia to direct the photography on Twentieth Century-Fox's Technicolor production, "Kangaroo," was joined in Sydney recently by Australian cameramen and heads of the camera industry there. Those included Arthur Rogers, V.E. Tripp, Frank Vesper, Frank McElhinney, David Barham, Ben Hansen, Sam Meltz, George Heath, Gus Stone, Sydney Ward, John Laska, and M. Street-Golds.

November 1st is starting date set by Twentieth Century-Fox for its Technicolor production, "Kangaroo," to be filmed in Australia. Director of photography Charles G. Clarke, A.S.C., has been in Sydney several weeks preparing crews and camera equipment for the job. In all Clarke has five cameras and a small army of technicians at his disposal. Production will be shot with Fox's own cameras, using cassettes, the picture edited in monochrome, and finally cut

and printed from the original negatives in Technicolor. Result will be same as if Technicolor film and cameras were used.

In addressing *American Cinematographer* recently, Clarke said he believed present trends indicate artificial sets are largely going out of use. "They're costly to build, never as convincing as the real thing, and raise enormous problems of camera movement and cutting," he said. He also saw closed circuit television units eventually incorporated into motion picture cameras to provide electronic viewfinders for directors of photography, enabling them to keep an accurate check on what the cameras are taking, as they are taking it.



JOHN SEITZ, A.S.C., winner of the A.S.C. Picture Of The Month Award for photography of Paramount's "Sunset Boulevard."

John Seitz, A.S.C., has won his first award for photography of Paramount's "Sunset Boulevard." *American Society of Cinematographers* has singled out his cinematic accomplishments in this picture for its "Picture Of The Month" award for August. Picture is rated an excellent contender for an Academy Award and other national awards for its photography. Seitz, for many years one of Paramount's cinematographic stalwarts, will be remembered for such other outstanding photographic successes as "The Big Clock," "The Gun For Hire," "The Lost Weekend," "Miracle Of Morgan's Creek," and "Five Graves To Cairo."

American Society of Cinematographers, last month admitted seven new members to its ranks. New resident members include Faste Brown, director of photography with Columbia Pictures; Ellis W. Carter, director of photography for past 20 years with Pine-Thomas and Paramount, now with Columbia; Laywood G. Dunn, director of photography, special effects, R.K.O.-Radio studios; Donald C. Glouner, director of photography at Columbia; Ernest Miller, director of photography at Columbia; and Harold E. Wellman, director of photography at R.K.O.-Radio. Elected associate member was William Eslonson, head of the camera department at R.K.O.-Radio.

American Cinematographer is 10 years old this month. Three hundred sixty consecutive issues with never a miss is a proud record in this particular field. It would not have been possible without the enthusiastic cooperation and support of AC's thousands of subscribers and its many loyal advertisers, several of whom have appeared consistently in the magazine almost since its inception.

Today, *American Cinematographer* is read the world over wherever movies are made. It not only goes into the

(Continued on Page 307)



THE FIRST "American Cinematographer" cover is replica of Vol. 1, No. 1 issue of *The American Cinematographer*, published on November 1, 1920. Current issue marks publication's 35th year.

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COLOR EXPERT David L. Quail, one of the nation's leading free-lance cameramen, sets up his Maurer 16 mm. prior to shooting a scene for an industrial film. He and dozens of free-lance cinematographers like him know, use and recommend the Maurer camera.



ACE CAMERAMAN and leading film producer, Irving Hartley of Hartley Productions, N. Y. C., shooting a scene at Chichen-Itza, Guatemala, for the Fox American World Airways color travel film "Wings to Mexico and Guatemala."



TOP ANIMATION TEAM—William S. Henrich, Camera-man, of Transfilm Inc., teams up with a Maurer 16 to work out camera effects for a slide motion picture. This leading film company selected Maurer as the 16 mm. camera that best fills its needs.

For details on this, and other Maurer equipment write

MAURER VERSATILITY AT WORK

Here are three examples of the unequalled versatility of the Maurer 16 mm. camera. Whether the demand is for hair-line accuracy... dependable performance under all conditions... unique features or simplified operation... every phase of professional production has found Maurer to be the answer to all camera problems.



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THE SINGLE TV camera employed on many budget video shows is made to do the work of two or three by means of a dolly which enables the operator to follow the action in single, horizontal shots, but with variety in the camera angles. It also requires a cameraman significantly different in skill than to keep up with demands of the changing action.



THE SAME IDEA has been adopted by producers of video films to add further economy in production of such films. More recently the multiple camera technique shown has been employed in shooting films for television, the increased use of cameras and crews being offset by economical film, variation of players and general overhead expense.

IN THE PAST few years, which might conservatively be called the "trial and error" period of American television, certain techniques of production and transmission have become fairly well standardized. But even with the strides that have been made, it is obvious to those who work day by day in the new medium that the surface has only been scratched, and that TV is today on the threshold of a period of refinement during which we may expect a far greater degree of technical finish and production quality.

One fact that has emerged quite clearly during television's experimental years is that the motion picture is inseparably linked with television. There are even those who go so far as to predict that the motion picture industry will inevitably become "married" to TV. Whether or not this is true remains to be seen, but it is a fact that a large percentage of Hollywood technical facilities are being utilized at this time in the production of films for television. And although we have as yet only about 100 television stations in this country, three already have developed an acute shortage of acceptable films to supply the needs of those stations.

When one steps to realize that motion picture film (including kinescope recordings) accounts for from 50% to 100% of the programming on the nation's TV stations, the importance of the motion picture to the new medium becomes quite obvious. In fact, it is safe to assume that film will become more and more essential to programming as time goes on, even after coaxial cables do away with the necessity of kinescope recordings (which are admittedly a poor

second both to straight live shows and direct motion picture photography).

There are several reasons for this. Firstly, the visual scope of live TV is definitely limited by such factors as budget, stage space, time limitations and mobility of equipment. Some of these limitations will be minimized as time goes by, but they can never be completely eliminated. Secondly, even if adequate rehearsal time could be given each TV show (which is impractical for at least a dozen reasons) the likelihood of "fluffs," both technical and dramatic, would still be ever-present. There are no retakes in TV, a fact only too painfully evident to those of us who also work in motion pictures. When a live scene goes out over the air, whether it is good or bad, there is nothing that can be done to change it. In filming, if a scene is not up to the standard of excellence we simply retake it until we are satisfied—and if the final footage still lacks pace or smoothness, we can

work further improvements in the cutting room.

When films were first used on television in this country, it became obvious that motion pictures made for showing on theatre screens were not perfectly suited to the video medium, and that certain adaptations would have to be made in showing films made for television. Because of the relatively small size of the picture area of television receiver tubes, long shots were indistinct and lacked detail. Moving camera shots, especially those involving horizontal pans, often produced disturbing distortion at the picture edge. Lighting having a contrast suitable for satisfactory results on a theatre screen was found to be too harsh when the same films were projected on television.

Out of these observations emerged a new technique of motion picture production, a type of cinematography adapted expressly for the video tube. This "tele-

(Continued on Page 100)

Economy Prime Factor In Producing Films For TV

Careful pre-planning key to successful TV making, says KOTV's production director, citing influence of live show techniques in the photography of better films for video.

By HERB A. LIGHTMAN

Production Director - KOTV-Camden Television



INTERIOR of old Norman castle, built during the reign of King Edward I, was used for several interiors for "The Black Rose." Inevitably director of photography Jack Cardiff was restricted to light units placed outside windows and throwing light into the interior. Result: deep, and strikingly realistic, illumination.



ONLY two 36-R "Beckes" and a few 150-watt units were available for lighting narrowest interior of the massive stone castle.

Shooting A Medieval Documentary

PARADOXICAL though it may sound, "The Black Rose" could justly be called a medieval documentary. This picture photographed in Technicolor, is notable for its realistic backgrounds in comparison with the usual artificial atmosphere of studio-built sets. The period film is perhaps the most difficult of all to make because costumes, props, "antique" sets and furniture are so much more obviously make-believe than modern settings and are instantly connected

Lighting ancient stone castles or interiors of desert tents, and painting desert sands black for night shots are just some of the technical problems encountered in photographing "The Black Rose."

By JACK CARDIFF, A.S.C., B.S.C.

with amateur theatricals, historical pageants, charades and the like. Somehow, studio-built castle sets always look what they are—then plaster facades; film sets of armour usually look terrible—dulled down for cautious cameramen until they resemble silver painted cardboard, costumes always look so glaringly new—and Technicolor certainly helps to put a new coat of paint on everything!

In "The Black Rose," director Henry Hathaway brought the welcome freshness of realism into dusty concepts of the period picture. This realism is his key-

note, as can be seen from all his great pictures in the past, but this time he had a problem: his authentic backgrounds were spread over many thousands of miles.

Well, it was done.

The story called for great stone castles in England, so we searched and found the genuine articles—magnificent Norman castles actually built during the reign of Edward I. And when the story traveled to the exotic East, through shimmering deserts, snow-capped mountains and bustling Arab cities, so we traveled too, a colossal odyssey of over one hundred technicians and stars, 1000 camels, 500 horses and £2,000,000 worth of material.

It was conducted like a military campaign under "Generalissimo" Hathaway.

DIRECTOR Henry Hathaway and director of photography Jack Cardiff (right) look up a short ancient Norman castle for "The Black Rose."





PHOTOGRAPH studio lights (above) mounted out of camera range in arched behind produce natural shadow glow in studio scenes



WHERE camera faced bright windows, neutral density filter gels were applied to surface of glass to balance lighting



INTERIOR of native's tent on a location in Morocco, showing some of the lighting equipment used for illumination

Air shuttle services covered the 1,500 mile air route, and daily air and sea shipments included such items as 150 tents, 12,000 arrows, 1,000 Mongol bows, 200 lances, 100 swords, 200 Chinese costumes, 200 Mongolian costumes, Chinese ornamental dragons and \$1,000 worth of animal skins. All these costumes were worn daily for weeks before required, until they really looked as though they belonged to the wearer. Ty Fournier's costume was really odd, cut practically nothing and was worn and stained with a realism no one could doubt.

Then Hathaway rightly despised wigs; those conventional curls always look about as real as Santa Claus at Macy's—and so the leading actors had the authentic Medieval close cut.

Every prop in the picture was closely scrutinized and, in most cases, studio-made swords, wallets, trunks, etc., were replaced with the genuine antique article.

Tyrone's white cap was originally on the dusty head of an Arab boy in Morocco. I grabbed it, paid the boy a few pennies for it, and Ty used this hat in the picture. Although powdered with germside, it was never washed!

Our suits of armour were shining authentic armours. I had to be careful placing lights, but even a flare was better than that silver paint look.

All this realism paid unquestioned dividends, but I hardly need say it was difficult technically. After we had shot those tremendous desert scenes—long, long shots of hundreds of tents—we were then supposed to cut to the interior of a tent. Done later in the studio? Oh, no. Done right there on the spot! Inside a black camel-hair tent on a burning desert. Imagine doing dialogue scenes.

(Continued on Page 104)



TENT INTERIORS were shot on actual location in the burning desert of Morocco, aided by a few sets and a 5000-amp. mobile gen. generator



300-110000 spotlight reflectors were put in use to augment light of the arc in filming interiors of the black desert tents



HYDRAULIC lamp stand at maximum height. Stand offers elevation range for lamps and backs from five to 13½ feet.



OPERATOR at hydraulic controls. A flick of wrist will elevate lamp stand to desired height; opening valve at left will allow it to descend.



LAMP STAND at maximum elevation. Good clarity for key and back lights; it offers quick change in lamp position without need for erecting or reconstructing parallels.

Quick Change, Up Or Down

Thanks to new hydraulic lamp stand, key and backlight positions may be altered in less than sixty seconds.

By A. ROE

A COMPARATIVELY recent development in set lighting aids for motion picture studios is the electro-hydraulic lamp stand developed by Ralph Hoge of Thomas Restalis, Inc., Hollywood. Its chief function is to provide quick and easy change in elevation of key lamps on a set without need for erection or reconstruction of lamp parallels.

Where this lamp stand is not in use, often a director's sudden decision to alter a bit of action on the set means the key light and possibly the backlight must be raised or lowered. If the lamps in question are set up some distance from the floor or parallel, they must be removed temporarily and height of the parallel changed to conform with the lighting needs of the change in action.

This new lamp stand makes such light changes possible instantly and without the costly delays entailed where parallels must be moved or altered. Where a script change means moving a player several feet forward from the position for which the lamps were originally placed, for example, a flick of a button lowers the lamps to the new height necessary to supply key and back light for the player's new position. If lamp angle must be changed, this may be done quickly by lowering

the lamp completely, changing its angle, then elevating it again—all in a matter of a minute or less.

The lamp stand is designed to accommodate the heavier lamp-rangings from Seniors to Brutes, or those lamps normally used for key lights or three-quarter back-lights and cross-lights for Technicolor. Elevation range (of lamp centers) is from five feet to 13½ feet. The stand may be hoisted with a cross arm, if necessary, to accommodate special light placement in intricate sets. In such cases, the cross arm is counterweighted to insure proper balance necessary for smooth operation of the hydraulic shaft.

The lamp stand base is the conventional tubular tripod type fitted with 20" by 2½" pneumatic rubber-tires and wheels, making possible use on location or lot as well as on the sound stage. At the base is mounted the hydraulic pumping mechanism and the electric motor drive, and here also is connected the cables leading to the grid. From the top of this housing two extension cables run to the lamphouse, and are ample to accommodate the largest lamps at the maximum height.

To elevate the lamp stand, the operator merely flicks a switch which sets the hydraulic motor drive in motion, raising the lamp at a moderate rate. To lower the lamp, a small valve is opened, allowing the stand to recede slowly. When lamp has reached the desired level, the valve is closed, and the lamp remains stable at this position until changed again.

Economy-minded independent producers, of course, have been the first to realize the money-saving potential of this equipment and as a result the stands are in almost daily use at Motion Picture Center and General Service studios in

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BELL & HOWELL'S Design 5125 Model D 35mm continuous film printer has been greatly improved with eight new features.



THE 16mm PRINTER, Design 5125 Model A, also improved with same features as 35mm model plus a new "safety margin" feature.



NEW TYPE circuit interrupter, Accuton, along on new switch (arrow), new replaceable old style contact-type circuit switch.

Bell & Howell Continuous Film Printers Improved

New features on both 16mm. and 35mm. machines increase final printing results and aid laboratory personnel in the handling of film.

By LEIGH ALLEN

NUMEROUS modifications and improvements of two Bell & Howell continuous film printers are such as to make them virtually completely new machines. All of the changes are the direct result of laboratory personnel suggestions resulting from actual field performance tests with the Model J 16mm. and Model D 35mm. printers. In other words, Bell & Howell Company sent its engineers out among its equipment users in the laboratories and studios of the motion picture industry and received first hand ideas and suggestions for certain improvements for what was already

considered tops in film printing equipment in the industry.

Among the more important improvements are the stainless steel ball-bearing film rollers which replace the old solid cold-rolled steel bearings. All feed and takeup guide rollers on both the 16mm. and 35mm. printers have been re-designed to include the new ball-

bearing film rollers. This change is an important improvement in that it prevents binding of guide rollers and the consequent damage to film.

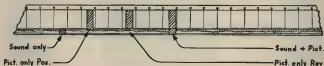
A new type circuit interrupter incorporating an Accuton switch now replaces the old style contact-type circuit interrupter on both printers. This switch is pre-set at the factory for maximum efficiency. Much longer life is said to be a salient feature of the new Accuton switch.

Both the 16mm. and 35mm. printers now feature a new type motor starting switch which is recessed in the printer pedestal, at the same location previously occupied by the old porcelain switch. The new switch is of the toggle type and is enclosed, thus eliminating all possibility of arc or flash.

To insure greater film protection, all printers are now equipped with friction-type feed flange film hubs that retard inertia of the film when the printer mechanism is shut off, thus avoiding untravelling of the film roll, causing the snapping of the film on the feed flanges.

(Continued on Page 304)

DIAGRAM BELOW shows how new printer line on the 16mm. model allows a 350" unexposed area between sound and picture on reversal film. 350" double exposure on positives—providing a safety margin band between picture and sound track.



Save The Surface And Save All

Growing use of lacquer coating for both 16mm. and 35mm. films safeguards negatives and extends life of release prints.

By FREDERICK FOSTER

Increasing use of motion picture film outside of the large, well-equipped motion picture studios, such as in the educational and television film industries, has brought with it a number of problems for producers arising from handling. Two factors which tend to lower screen quality are film abrasion and oil mottle. Abrasion or scratching is caused by careless handling of the film when removing the original negative from one reel to another; when handling the negative during the break-down process; when viewing the negative in a Moviola or other type of film viewer; or improper handling when projecting, cleaning, re-winding, code numbering, etc. Today, film producers are demanding positive protective measures that will safeguard their original negatives against such damage.

Oil mottle is another serious harmful effect which mainly concerns the positive or release print. Usually oil mottle is the result of running a film through a projector which has been carelessly lubricated so that some of the excess oil is transferred to the film where it remains until it is removed by a suitable cleaning process. Too often oil on film is not considered a dangerous condition and it often happens that oil that gets on a film during its initial screening remains there for the entire life of the film, greatly impairing its screen quality, of course.

The modern treatment of film, both color and black-and-white, as a protective measure against abrasion and oil mottle consists of coating both film surfaces with lacquer.

Lacquer coating affords many advantages which the practical minded film user cannot fail to ignore. Actually, no film surface will indefinitely resist abrasion and scratches—even treated film surfaces will become scratched. In this connection, however, lacquer coating provides a primary advantage, in that normal abrasions and scratches do not penetrate the protective lacquer coating to damage the film surface. Since the scratched lacquer coating may easily be removed and the film re-lacquered, indefinite protection is assured the film surfaces, and new print projection quality continues. This process can be repeated

as long as the perforations are good, thus extending the useful life of the print.

The advantages of lacquer coating negative footage and other original film, especially if quantity prints are to be made from them, is definitely obvious. In lacquer coating the producer has a film protection process equally effective for originals and production prints.

Lacquer coating possesses additional virtues. For example, since it seals in the normal moisture content of the film, shrinkage and brittleness are reduced and the film remains pliable, thus minimizing breakage hazards in projection. This same sealing action of the lacquer coating tends to seal in the dyes in natural color film.

Danger of first run damage to recently processed film is virtually eliminated by lacquer coating. This is accomplished by the lubricating effect of the lacquer,

which prevents chatter or strain on the perforations from emulsion gathering on the aperture or pressure plates. It is evident that by lacquer coating both sides of the film, extra protection is achieved for films used in continuous projectors, and for any film likely to receive extremely hard use by extended running.

The disturbing projection quality due to noticeable flicker caused by oil mottle on the film is probably considered a more serious problem than occasional abrasions and scratches, which usually escape the observation of the average audience.

In coping with this problem, lacquer coating makes another distinct contribution to film protection and the requirements of excellent projection quality. Screen flicker due to oil mottle on the film is, for all practical purposes, undetectable with lacquered film. Since the glossy lacquer coating and oil spots on the film possess similar light transmission characteristics, the screen effect of oil mottle is practically eliminated. It is the difference in the transmission properties of uncoated film and oil spots that aggravates screen flicker. From the

(Continued on Page 302)



CORNER of Duar's motion picture laboratory, showing lacquer coating machine for 16mm and 35mm films. Controlled heat and filtered air quickly dries coated film.

SLAB-ENCLOSED duPont lacquer applicator is shown at left. As film moves slowly past, it passes over ultra-sonic surface which dapples film coat of lacquer on film surface.

On the set —
On location — —
On the screen — — —

The picture best
By every test
Is faultlessly
delivered by

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ACTUALLY it is quite easy to organize the editing of your films in such a way that the cutting becomes no chore at all. It can even be a very pleasant and creative experience if you don't let it overwhelm you. There is a mechanical or formula routine which is followed by professional cutters, and which the amateur movie maker can adopt very conveniently to his own use.

Ideally the editing of a film should begin even before the shooting stage. If the cameraman will roughly outline sequences of scenes that he wants to shoot in a certain locale, he will not only save film and insure better continuity, but he will also be able to do quite a lot of his cutting in the camera—thus reducing the editing chore to a minimum. If such a scene list is made out in advance or at the time of shooting, have it handy as a guide when editing.

The first step in the organization of your cutting is to arrange the various rolls of film in order as shot and give each a consecutive number. Then project each roll or run through a viewer. If scenes were not "slated" during shooting, an identifying number should be scratched on the emulsion side of the first few frames of each scene. Badly-exposed or discard scenes should be marked so they can easily be culled out

later. As the rolls are thus previewed, another descriptive list should be made of the scenes in chronological order, using the identifying numbers, and giving a brief resume of the camera angle and the action in each shot. For example, the designation of one random scene might read: *Scene 28 - L.R. - Uncle Jack in motorboat pulling away from shore toward camera.* If you recall the action of your footage, brief descriptions such as this will serve to clearly establish the scenes when you start to assemble them later.

When all scenes on all of the rolls have been catalogued in this manner, you are ready to start "breaking them down." This consists of cutting the scenes apart and culling out those which have been marked for discard. The good scenes are carefully rolled up, taking special pains to avoid scratching or other

damage. Each scene thus rolled is secured with a rubber band, and a slip of paper on which is marked the number of the scene is inserted under the band for instant identification. Most amateur film editors build or purchase pigeon-hole boards divided into 50 or 100 separate shallow compartments, each of which bears a printed number, similar to that shown in accompanying photo. Each scene is merely rolled up and placed in the compartment corresponding with its number.

Now you are ready for the process known as "cutting on paper." It is here that the descriptive scene lists which you made in breaking down the film really come in handy. Using these lists, you arrange and re-arrange the scenes in various orders until you achieve a pattern which you feel will have the desired continuity. Many editors find it handy to make out these lists using a separate 3 x 5 card for each scene, so they can be shuffled about with greater ease.

In doing this "paper" cutting, you are concerned not only with arranging scenes in their logical sequence according to continuity of action, but you are also interested in getting as much variety and pace into the editing as possible. You should see to it that each sequence is well established with a long shot, and that the locale is also re-established from time to time with a similar shot. You should endeavor to use your closeups for full effect, placing them where the action requires a close view of the subject for clarity or variety. Where it appears that you have left gaps in the continuity during shooting, scan your scene list for re-leased scenes that may be used as cutaway shots to bridge these gaps.

Incidentally, there is no better way to learn how to cover a subject fully from the standpoint of continuity than to do your own editing. In the cutting room you will quickly learn what shots you neglected to make, and why these shots are so vital to a smooth flow of action.

(Continued on Page 26)



A WELL ORGANIZED editing table showing five of the important features mentioned in Mr. Loring's article: the pigeon-hole film strip holder immediately above film viewer, and movie rack film receptacle and gassing rack, left-center. Adequate tools make a simple task of film editing.

Advantages Of Variable Shutters In 16mm. Cine Photography

By JOHN FORBES

PERHAPS the least understood feature of the cine camera is the shutter. How it functions, what its effect is on the exposure, and the comparative results to be obtained with shutters of various size openings is something that is rarely considered by the novice cinemafan. But to the advanced 16mm. movie maker, all this is quite important, even though his camera may only feature a shutter of the fixed type.

To describe briefly the functions of the cine camera shutter, when we expose a frame of cine film, the film is held motionless in the camera for a fraction of a second. Before the next frame can be exposed, the film must be advanced in the gate in order to bring an unexposed frame in place for the next exposure. During this advance of the film, the light coming through the lens must be cut off momentarily, and this is the function of the shutter. In most 16mm. cameras the shutter is of the rotary disc type. Part of the disc is cut away to permit the passage of light to the film for the exposure. The disc shutter rotates continuously as the camera is operated.

Obviously, the larger the opening of the shutter, the more light reaches each frame of film and consequently the greater is the period of exposure. But there are some definitely limiting factors. Most important of these is the mechanical problem of moving the film. During the period between the exposure of two successive frames (that is, the time period during which the shutter is "closed"), the film must be started, moved, then stopped dead. Clearly, if

the open part of the shutter is large, the film must accelerate, move and decelerate very quickly. If the open sector of the shutter is smaller, the film can be moved more slowly and, accordingly, more gently. But we pay for this less strenuous movement by getting less light for the exposure.

What has all this to do with ordinary cinematography, you may ask, remembering, of course, that changing speeds and shutter openings are possible only with a few cine cameras? Well to explain further, suppose we have an ordinary still camera and the established exposure for a given shot is $1/8$ at $1/35$ second. If we shorten the exposure time to $1/50$ second, we will have to open up the lens a corresponding amount—to $1/5.6$ —in order to secure the same exposure.

It's the same in cine camera work. Suppose we are using one of the popular cine cameras which has a shutter opening of 204° . This gives an exposure interval of $1/27$ second at 16 f.p.s. If we shoot a scene with this camera and find that $1/8$ is the right stop to use, the resultant exposure will be different from what another cine photographer would secure with a camera having a smaller shutter opening. Let's say the other photographer's camera has a shutter giving a $1/48$ second exposure. If he is to match our exposure on the scene, he will have to shoot it at $1/6.3$ (or lens stop nearest this figure, i.e. $1/5.6$). If we, with our $1/27$ sec. shutter, are shooting at $1/3.5$, the other filmer will have to open up to $1/1.9$ to get comparable results; and if we are

shooting at $1/1.9$, the other filmer with the faster shutter (giving less exposure per interval) won't be able to shoot the scene successfully at all, for he would have to use a lens opening of $1/1.1$ to match our exposure.

Another point to consider is that by using the smaller lens stop, the lens will have much greater depth of focus than would the lens on a camera with a smaller shutter opening; and this difference would be increasingly noticeable as the lens was opened wider or focused on nearer objects, as for closeups.

On the other hand, is the matter of getting clear pictures of fast-moving objects, the camera with the smaller shutter opening offers a distinct advantage. It affords a shorter exposure interval and this in turn means that fast moving objects will have less time to move during an exposure, and consequently less blur will result.

Obviously, the solution to the shutter problem for the advanced amateur's cine camera is the adjustable shutter, same as found on standard 35mm. motion picture cameras. This would permit adjusting the shutter opening to suit the shot. All professional 35mm. cameras used in the studio have variable shutters and most of them allow adjusting the shutter opening while the camera is running, if necessary. This has proven a very valuable adjunct in shooting scenes where the camera moves in and out of dark areas, or for track effects, where speed of a person or an object is to be altered without stopping the camera.

Of the 16mm. cine cameras in popular use today, two are provided with variable shutters, adjusted manually by the operator—the Eastman Cine-Kodak Special and the Pathé "Super 16." This feature has been used mainly for making fades and lap dissolves, but it presents other cinematic possibilities also.

Here are some of the ways 16mm. cinefilmmakers may benefit their cinematography by varying the shutter opening—ways that the professional cinematographer long ago employed to improve the quality of his camera work:



204° - 1/27 Sec.



180° - 1/32 Sec.



135° - 1/42 Sec.



50° - 1/115 Sec.

Relative exposure intervals afforded by camera shutters of various size. The smaller the shutter opening, the faster the shutter "speed" with greater ability to "freeze" action.

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Entry Blanks Now Available For American Cinematographer's 1951 Amateur Motion Picture Competition

Judging and classification of films begins
December 1st. Contest closes March 1, 1951.

MOVIE AMATEURS from all over the world will compete in *American Cinematographer's* 1951 Annual Amateur Motion Picture Competition. Unlike last year's contest, participants do not have to be a member of or be sponsored by an Amateur Movie Club. This year, contestants will enter their films direct.

Inquiries regarding contest rules have been received from amateur movie makers in Britain, Holland, Italy, South Africa, France, India and Japan—indicating the widespread interest in AC's 1951 competition.

There are to be ten trophy awards this year for the ten best films submitted in the competition—the *American Cinematographer Awards* presented by the American Society of Cinematographers.

Contest rules are simple:

Each entry must be wholly amateur produced, except for any titles and film laboratory work. Any sound accompaniment must be recorded exclusively by the entrant and/or his amateur associates.

Film length limited as follows: 8mm., 400 feet; 16mm., 800 feet.

Each film reel and its container must be plainly and securely labeled with owner's name and address.

Films originating outside the continental United States should be securely wrapped or boxed, preferably in carriers which may be used for their return. Also, necessary arrangements should be made that will insure films passing all neces-

sary customs and export-import regulations on their return.

All films must be shipped on reels and in case to contest headquarters in Hollywood, fully prepaid. Entry blank should be mailed to contest chairman in advance of sending films. There is no entry fee for contest films.

Upon close of competition, all films received will be returned via Express collect and insured (in the United States). Contestants residing outside the United States should make the necessary arrangements in advance for the return of their films in keeping with their country's postal and import regulations.

Fees for return postage and insurance for foreign films should be sent contest chairman with entry blank. In most instances an International Postal Money Order will be the simplest way to handle this.

Films may be submitted on or after December 1, 1950. Closing date of competition is midnight, March 1, 1951. Results will be published in the April, 1951 issue of *American Cinematographer*.

As in the past the panel of judges who will evaluate films in this year's competition will be six prominent Hollywood directors of photography—all members of the American Society of Cinematographers and each an 8mm. or 16mm. movie making enthusiast.

Qualify your entry early by mailing in your entry blank without delay. Write today for your entry blank, using the coupon below.

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Se: Kindly send me official entry blank for AMERICAN CINEMATOGRAHER'S 1951 Amateur Motion Picture Competition. I plan to enter an 8mm. _____/16mm. _____

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FILMS FOR TV

(Continued from Page 177)

photography" is characterized by an emphasis on close-ups, with a corresponding avoidance of extreme long shots. Extreme contrasts in lighting have given way to a modulated, but relatively flat lighting that rarely goes beyond a ratio of 4 to 1. Sets and costumes are designed in such a way as to avoid the use of solid blacks and whites, two tones which in the extreme tend to cause an effect known as "bleeding." Moving camera shots are still used, but the horizontal pan and tilt have given way to dolly movement straight in to or out from the set. There is a reversed or dramatic approach in that performers are now urged to play to the camera.

This new approach to cinematography has been adapted not only to commercials, but to entertainment films conceived especially for showing on television. Several series of dramatic, comic and western film using this technique already have been completed, and a great many more are slated for early production.

One of the most skillfully produced series made especially for television is "The Lone Ranger," produced by Apex Film Corp. and adapted from the famous radio series of the same name. The technical excellence of this film series, which was photographed by Mack Stenger, A.S.C., is the result of a good deal of experimentation carried on before actual shooting began. Various camera effects and treatments were tried and the results projected on a closed television circuit, so that a true appraisal of the film's video rendition could be made. While a certain number of long shots are an integral requirement of a western film, these are held to a minimum and are often drawn from a stock shot library of such scenes shot economically all at the same time on location. Other "extras" are shot on the sound stage using a standard set which can be approached from many angles for variety. A huge cyclorama skillfully painted to simulate a cloud-filled sky often forms an excellent background for these scenes.

The "Ranger" series makes good use of close-ups and emphasizes action while managing to keep that action within the bounds of relatively tight compositions. Each episode for a 30 minute time slot is filmed in two days, and when one is finished another is begun immediately—resulting in a production average of three films a week. At this writing 78 separate episodes have been completed. Detailed pre-planning plus unusual teamwork between cast and crew have

permitted this prodigious schedule with out any loss of production quality.

From a successful series such as "The Lone Ranger" can be drawn several guidelines to efficient film production for television—and indeed it will be necessary to adopt such an approach at least until the FCC freezes on new stations is lifted. With only 100 stations as possible outlets for any film, the budget factor becomes most important—and it becomes correspondingly clear that such films cannot be shot with the production value and apparent lavishness of the Hollywood entertainment feature.

Pre-planning is the key to successful TV film production. All programming for television is set up in units of 15, 26 or 52—and the planning for a series must be done on an overall basis. A basic formula must be established and adhered to throughout, so that the scripts will have certain common denominators while retaining enough variety to allow each episode to stand alone as a separate unit of entertainment. The basic formula, however, will allow the grouping of acts and set-ups for economy in shooting. Personnel expenses can be held to a minimum by similarly grouping sequences requiring an unusually large cast or crew. But such economies cannot be effected without detailed overall pre-planning. An extra bit of time spent at this stage will pay off many times when production gets under way.

In searching for rapid and economical shooting procedures, several filming techniques have been adapted from the methods we use in staging live shows. Some stations, particularly in their daytime programming, use only one television camera on certain low-budget shows. The method is far from ideal, artistically speaking—and it requires a cameraman figuratively restrained on roller skates to keep up with the demands of moving in and out to follow the action. However, they do manage to get shows on the air in this manner, while holding production costs to a minimum.

This method, with camera restraints, can quite successfully be adapted to filming for television. Stated in simple terms, a script is broken down for shooting in such a way that individual sequences which would ordinarily be further broken down into separate scenes, are instead filmed in a single "take" lasting anywhere from two to ten minutes. Variety and the illusion of separate shots is achieved by dollying in and out, and by panning with the action throughout the take. This system has the basic advantage of allowing the filming of a considerable part of the script all in one fell swoop, so to speak—and if properly

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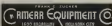
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filmed, a great smoothness of quality can result.

However, the above mentioned method cannot be approached haphazardly if any degree of professional quality is to be achieved. On the contrary, the script must be very carefully analyzed and all camera shots (individual compositions) plotted to complement the action to best advantage. If there is a certain subtle bit of action, for example, one must make sure that the camera will be in close-up position at that point in order to present that action clearly and forcefully. It goes without saying that each sequence should be thoroughly rehearsed in advance so that action and camera will coincide, camera movement will be smooth and follow-focus will be accurate. If slight faults are made during the filming of long sequences, these shots can be "picked up," or separate shots from a different angle, and spliced in to the master some later.

The multiple-camera technique of shooting with three or more cameras simultaneously is gaining favor. The increased cost of a triple camera crew is more than offset by economy in time, salaries of principal players, and general overhead expense. Using this method 30 minute shows can be shot in a surprisingly short time, assuming they are fully rehearsed.

The usual method is to set up two stationary cameras at different angles and with different focal length lenses. A third camera is mounted on a dolly to move in and out during shooting. Obviously, it is quite difficult to light for three separate angles at the same time—but a suitable compromise has been found possible by those successfully working with this method. The result, when edited, has the somewhat static quality of the average live show speaking conversely, but a great deal of action can be filmed with a variety of angles in the shortest possible time, and—granted that the subject matter is entertaining enough—a great many shows of simple format can be economically filmed in this way.

The future of film in television is very optimistic in view of the greatly increased activity in this field. The demand for good films shot especially for television grows steadily day by day. The very nature of the medium requires a continuous flow of fresh material. Basically a visual medium, television already leans heavily upon the technical cinematic know-how developed through many years of motion picture production. The future of television and the future of the motion picture unquestionably lie in parallel paths which grow steadily closer each day.

SAVE THE SURFACE

(Continued from Page 312)

above, one might also make the observation that the glossy lacquer coating may contribute to projection quality by added brilliance to the projected image. Oil does not harm lacquer coated film, and it can be wiped off easily without damage to the film. In similar fashion, finger prints can be cleaned easily from lacquer coated film.

A surface coating with all the protective attributes and advantages already discussed may be presumed to be expensive in application. On the contrary, lacquer coating is so inexpensive that every film maker, film library, and distributor hardly can afford to do without it. Lecturers, particularly those who project original Kodachrome films with their talks, now are able to screen these films indefinitely when lacquer coated. In these instances, such films must be coated immediately after they have been processed and before they have been edited or screened for the first time. Coating of both sides of such films presents an additional problem in splicing in that both the emulsion side and the base sides of the film ends must be scraped before applying cement.

The question often asked is "To what extent does such lacquer coating itself become scratched?" or "Does such coating scratch more or less readily than normal film surfaces?" Laboratory comparisons have indicated that coated films have the same scratch resistance as untreated films. However, without a single exception, the experience with these coated films in the field have indicated that they are definitely more resistant to abrasion than uncoated films.

Two well equipped companies offering this film coating service to both 16mm. and 35mm. film users are The Larsen Company on the Pacific Coast and Escart Motion Picture Service, Inc., in the east. The former is located in the Parke Laboratory, 6823 Santa Monica Blvd., Hollywood; the Escart company is situated at 7315 Carnegie Ave., Cleveland, Ohio.

Escart's coating machine, which is pictured here, consists of a chamber in which the stock to be coated is placed, wound on a reel, then driven past a roller-wick lacquer applicator. The film then moves into a drying chamber, in which clean air-flow and temperature are rigidly controlled, and finally emerges on an external takeup reel. Here the amount of lacquer applied is under precise control at all times.

The Larsen Company offers special coatings for originals, release prints and lecture films. They recently made a field



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test to evaluate the effectiveness of their release-out treatment under actual trade conditions. A feature picture was placed at their disposal and a portion of it given the release-out treatment at the time of release. The entire feature was then put into service and shown in all types of theatres. At intervals the print was returned to the Larson laboratory for re-examination. Screen tests of the coated and uncoated sections clearly indicated that

abrasion of the coated portion of the film was considerably less than that of the untreated portion.

Considering the tremendous savings afforded by such protection, the cost for lacquer coating is quite nominal, running around one or two cents per foot. In both the Escor and Larson processes, the old protective lacquer coating may be removed and the film re-treated to give extended service.

SHOOTING A MEDIEVAL DOCUMENTARY

(Continued from Page 370)

In this frying hell, in a desert hundreds of miles from anywhere, with the fierce sun piercing through so that no one could touch our Technicolor blimp without getting a severe burn—let us mention the added heat from any air light.

As we could see outside as well, it was necessary to boost my light level up to balance the glaring light of the open desert. All the usual tricks were used—gauze, gelatine, etc., but it was still a headache.

While in the desert, too, we came to a night scene to be shot in daylight. Blue films? Neutral density grads? Yes, but that glaring desert! And we also had to see camp fires burning!

That scene was really great fun to do. I had the whole area—about five acres—sprayed black, leaving only circles of light sand around the fires to represent a glow. Then each group around the fire held mirrors, silver and gold papers, which they reflected both as a fire effect and on their faces! It was a comical sight to see in daylight but quite effective on the screen.

When we shot on the Sultan Hassan's Palace at Marrakish (where 250 wives used to live) I had the same problem: extremely bright outside which forced me to open my lens wide for difficult interior lighting in a room without any studio facilities of any kind. I got away with murder on most occasions by shooting when the sun was obscured by clouds and, although the exterior was still over-exposed at wide open aperture, the result was equivalent to the sun being full out.

My location lighting equipment was small: 2 Mole-Richardson brutes, set 150-amp. arcs, and a few filler lights, powered by a 1000-amp. generator, so that I could never use all lamps at once and each lamp had to be placed to do its very best job.

It was in the English studies that I faced up to most problems. In the majority of cases I could only have lamps outside looking in, sometimes with no filler light at all.

This endorsed austerity, however, produced interesting results; the fact that I had so few lamps made the character of the lighting simple and realistic. No spotlights, therefore no phony backlight effects. I'm sure all cinematograph producers better work when their backs are to the wall.

To work inside four-walled rooms instead of fully-rigged open sets in a studio is certainly a headache, but invariably such situations bring a thrill of overcoming obstacles that we rarely experience when pampered with unlimited equipment and easy devices on a movie sound stage. But such were our problems and experiences in filming "The Black Rose."

FILM PRINTERS IMPROVED

(Continued from Page 371)

when the machine is again started.

The takeup flanges are friction-driven and made of light-weight aluminum, having a capacity of 2000 feet of film. Flanges operate independently of the film core, assuring instant stopping of printer without danger of breaking or snapping film. The takeup drive is coupled directly to the new keyed hub designed to receive standard plastic film cores.

Laboratory technicians plagued in the past with the problem of the picture area "bleeding" into the sound track will hail another new feature on Bell & Howell Model J ream. printers—an adjustable printing aperture designed with four separate stops marked "Sound Only," "Picture Only, Reversal," "Picture Only, Positive," and "Sound And Picture." The accompanying diagram shows how the new printer jaw allows a .005" unexposed area between the second and picture on reversal film, and a .005" double exposure on the positive film. This provides a black safety margin band between the picture and sound track on all types of film.

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There is accommodation for shortened film on the Model J ribbon printer, too. Although this modification will not be standard on new printers, and is available only on this model, it is now possible on special order to supply printers with relocated film rollers and aperture plates designed to accommodate shrinkage on positive film of 0 to .5%, and a shrinkage on negative film of .5% to 2.0%. The additional price for a printer so modified is approximately \$900.00. Printers thus equipped are ideal for printing negative or original Kodachrome that is excessively shrunken.

For laboratories engaged in printing films, color film, Bell & Howell has developed for special orders a new gate shoe for the ribbon. Design 5202 Model J printer that permits adding air pressure at the printing aperture. This shoe has been drilled with air holes and fitted with a compressed air channel that connects through the gate shoe bracket to an air valve. By applying air pressure through the air shoe to the film and counterbalancing with air pressure from the aperture housing, it has been possible to produce improved contact between films.

A high-intensity incandescent lamp for all existing Model D and Model J printers is available. This test is complete with suction-cooled lamp house.

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Page 402 of this issue

throughout control, lamp removable filter holder, and 300-watt projection type pre-aligned lamp. This lamp is said to be essential for quality printing of black-and-white fine grain film as well as all types of color film.

A comparison price to the 300-watt lamp assembly is a new selenium type rectifier for supplying 215-volt, 300 watt

DC to the printer lamp. This rectifier incorporates a regulator to produce a steady load or pre-set to assure constant voltage in the direct current output. Once the rectifier is turned on in the morning, no matter how many times the printer is turned off and on throughout the day, variance in the output will not be experienced, according to Bell & Howell Company.

ORGANIZE YOUR EDITING

(Continued from Page 385)

By observing these details, you will soon become instinctively aware of the necessary scenes to form a complete sequence, and you will automatically make sure you get them on film when shooting.

When you have jugged your scenes on paper until they seem to form a pattern with good continuity, it is time to make the first rough cut. Lay the scenes up in the order indicated on the "paper" cut but. A good method is to hang the scenes head up on an editing rack consisting of a wooden frame with a row of fine nails on it, suspended over a bin lined with clean gauze, as shown in the illustration. In this way, you can visually check each scene in relation to the scenes that precede and follow it, correcting any inconsistencies which may be obvious.

Next, splice the scenes together in chronological order, being careful not to cut off the slate numbers or any identifying marks scratched into the emulsion. Leave these guides intact until you have checked the rough assembly of scenes on a projector; thus if any rearrangement is necessary, you will still be able to identify the scenes by number. Next, run the reel of rough-cut scenes on a projector, paying close attention to the flow of continuity. You may have to run the film several times before you begin to absorb a certain flow and pace becoming apparent. Keep paper and pencil handy and make notes on further cuts or revisions to be made.

You may notice that some scenes are too long, that others have "dead areas" of action which should be trimmed out. Perhaps there is some jerky camera movement which can be deleted without interfering with the basic action of the scene. If you have overlapped action in staging your scenes, try to determine where the action of the two scenes matches especially well, permitting a smoother cut. You will find that complete notes taken on all these various points during screenings will prove very valuable when you actually start cutting.

Having organized your editing quite successfully up until this point, it is quite simple to follow through with similar

organization in the actual cutting. It is at this point that the average movie amateur becomes swamped with the task of bringing order out of cluttered chaos—usually ending up in a fairly frustrated state, with film all over the floor and a rather dim idea of just how to begin. The answer is to take a tip from the professional editor and work on one sequence at a time, beginning with the first and going on to the next sequence only when you are satisfied with the cut you have made. In cutting a sequence, think of it as an entity, so that sequence will have an overall flow and a unified meaning. This means that you will have to think ahead to a certain degree, because a cut that seems perfectly all right between two consecutive scenes, may seem less effective when viewed in terms of the other cuts that must follow.

In cutting, a good film viewer set between a pair of reels is essential. Consulting your notes, run your first two scenes back and forth through the viewer until you see a spot where a good cut can apparently be made. With a red grease pencil make a line across the film between the sprocket holes of the frames in each scene where you wish to make the cut. It is a good idea to extend this line into a T-shape, with the stem of the T extending into the "dead" area of the scene, or that which you will discard. This little trick will insure against cutting into the wrong part of the scene when you get around to splicing.

When you have marked an entire sequence for cutting in this manner, have yourself a splicing session and actually make the cuts. The editor who marks a single cut and then runs to make the splice not only wastes a lot of time, but he is apt to let the continuity of the sequence get away from him. It is far better to do the creative end of the cutting first, then attend to the mechanical part, or splicing, when the sequence is completed.

After splicing a whole sequence attach leaders and run the footage on your projector in order to check the impact from the screen. Invariably there will be some

corrections to be made—scenes shortened for pace, repetitious action to be deleted, etc. When you have made these changes and are satisfied that the sequence is as good as you can get it, roll the film onto a reel, put it aside, and go on to the next one. After all of the sequences are completed, splice them together in the order planned and screen the entire film for one final check. Seeing all of the action unfolding in consecutive order, you will probably observe some minor corrections still to be made.

Good editing depends not only upon the footage that is included in the final cut, but also upon that which is left out. There is a natural temptation to include in your final cut a great bulk of the footage shot, whether it is up to standard or not. The film editor, especially in cases where he shot the footage himself, must exercise rapid discipline in deleting all excess footage and all scenes which are not up to his technical standards. In this way, he will not only have a more interesting and professional-like picture, but he will learn to make his photography more precise and expert.

Scenes which are not technically bad, but which are deleted for other reasons, should be spliced together, catalogued by means of a brief descriptive list, and filed in cans. In this way, an interesting and valuable film library may be built up for use in future productions.

BULLETIN BOARD

(Continued from Page 374)

houses and offices of the hundreds of directors of photography, camera department heads, producers and film laboratories in Hollywood, but reaches the cameramen, producers and processors of motion pictures in the vast interim field and the rapidly growing TV film industry, both here and abroad. In addition, a substantial segment of its readers are to be found in the ranks of the advanced amateur movie makers.

As the recognized international "Magazine Of Motion Picture Photography," it has, more than any other medium, welded motion picture makers in all parts of the world into one common fraternity, which monthly looks to *American Cinematographer* for authentic news of latest technical developments in the production of 35mm and 16mm motion pictures.

Peter Hall, A.S.C., President of the Mile-
Richardson Company, Hollywood, was
elected President of the Society of
Motion Picture and Television Engineers
at a meeting of the Board of Governors
which preceded the opening of the So-
(Continued on Page 399)

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TV Ground Glass

Greiner Glass Industries Co., 781 East 142nd St., New York 34, N.Y., offers a replacement ground glass for 35mm. cameras used in filming motion pictures for television. The TV ground glass shows the full frame area of the motion picture film and the corresponding picture area of the television receiver tube. Thus, use of the TV ground glass

controls allow operation by non-technical personnel. Miniature tubes and bearings and batteries make possible the compact design that meets specifications of the ASA for sound level meters.

Meter weighs slightly more than two pounds and covers the range from 34 to 140 db above the standard ASA weighing characteristics that duplicate the ear response at various loudness levels.

New Service

S.O.S. Cinema Supply Corp., 602 W. 52nd St., New York City, invites users of motion picture equipment to list with them unused and surplus equipment they wish to dispose of through outright sale, or to make available for rent. S.O.S. will offer such equipment to its large list of customers without charge.

RCA's Magnetic Recorder

RCA-Victor, Camden, New Jersey, announces availability of its new magnetic recording system, first demonstrated by the company at the Spring convention of the SMPTE. System includes magnetic recorder-producer, master amplifier, recording amplifier assembly and power supply designed for high quality professional magnetic recording. Both 16mm. and 35mm. systems are available in portable or rack-mounted units. Units weigh approximately 300 pounds and are 21 1/2 x 23 1/2 x 13 inches in size.

New DeJor Camera

DeJor Amco Corp., 45-01 Northern Blvd., Long Island City 1, N.Y., announces a new cine camera model—the DeLuxe Citation 8mm. movie camera finished in genuine black Morocco leather.



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enables the cameraman to so compose his shots that none of the important part of the picture or scene will be cut off when the picture is seen on the television receiver.

Glass is furnished in a handy plastic carrying case with complete instructions for use. Price is \$24.50 and shipment is made by air mail or air express, according to the manufacturer.

Cinema Research Adds Facilities

Cinema Research Corporation, 7003 Rossmore St., Hollywood, announces a new photographic laboratory service for television and commercial film producers consisting of a new method of producing live action with animation in one operation. The company has recently installed two additional Acme animation cameras—making three in all—each with special background projection unit.

Price inquiries and personal inspection of the company's facilities are invited from producers of films, 35mm. and television films.

Sound Level Meter

Herman Hooper Scott, Inc., 385 Putnam Ave., Cambridge, Mass., announces a miniature sound level meter for measuring indoor and outdoor acoustic, machinery noise, and hearing requirements, said to be an ideal accessory for the motion picture sound engineer.

The unit, known as type 410-A, is about size of a small flashlight. Simple

Camera has some mechanism in the Standard Citrine model, including the exclusive DeJur feature — instant "Drop-loading" and "No-jam gate."

Camera speeds range from 12 to 48 f.p.s. Equipped with an f/2.5 coated, color corrected, click-stop Wollensak lens, camera sells for \$84.50.

Improved Kinevox Recorder

Kinevox, Inc., 4000 Riverside Drive, Burbank, Calif., announces an improvement in the standard Kinevox magnetic recorder that affords 33 minutes of uninterrupted recording and playback. Larger extension arms for supply and takeup reels — each with its individual electric motor drive — assure fast, positive takeup of the larger rolls of magnetic film.

The extended playback and recording interval thus afforded is said to be ideal for needs of motion picture producers, radio and television.

New style arms are also available for installation on all Kinevox recorders.

BULLETIN BOARD

(Continued from Page 397)

ciety's fifth semi-annual convention at Lake Placid, New York, last month. Mole will take office January 1, 1951.

Among those receiving Awards of Fellowship in the Society were Fred W. Gage, A.S.C. and Charles Risher, A.S.C.

Don Melikian, A.S.C., is in Spain shooting "The Man From Tangiers" Ted Pahl, A.S.C., who is Spain's leading director of photography, is acting as technical adviser on the picture. Shooting is going very slowly. Melikian reports, due to inferior equipment and lack of the many facilities normally found in studios in America.

Twentieth Century-Fox is planning further income in Hollywood production, also plans to make three features annually in Great Britain, according to Darryl F. Zanuck, who said Fox may also produce pictures in other parts of the world where additional values can be garnered for a picture, photographically or geographically. At present it has before the cameras in Germany, "Lepus Of The Deserted," being photographed by Frank Piller, A.S.C.; "The Bird Of Paradise," shooting in Hawaii, photographed by Weston Hoch, A.S.C., and will start the camera rolling on "Kangaroo" in Australia November 1st.

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MISCELLANEOUS

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of *The American Cinematographer* are available for most months of 1948 and 1949. Many earlier issues also available. All contain valuable technical articles and information relative to contemporary motion picture photography. The December issue contains an annual index as a guide to content of each year's 12 issues. Price of each issue: 16 U. S. \$.30; Foreign, 40c.

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QUICK CHANGE, UP OR DOWN

(Continued from Page 34)

Hollywood More recently, both Paramount and Columbia studios have employed the lamp stands. Director of photography Lee Garmus used them continuously in filming interiors for Columbia's "The Hero."

While most of the lamp stands are secured on rental from the Thomas Rental organization, production has increased to the point where small deliveries are being made on outright sales. The lamp stand is suitable companion equipment to the electric-hydraulic parallel developed earlier by Hoge, and provides flexibility of art lighting at lower heights than the parallels, which are primarily designed for the same function, but on much larger sets.

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OF **AMERICAN CINEMATOGRAHER**, published Monthly, at Los Angeles, California, for October 1, 1950

1. The names and addresses of the publisher, editor, managing editor, and business managers:

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ARTHUR E. GREEN

Signed and submitted before me this 10th day of October, 1950.

C. K. Buchanan
Notary Public

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5800 Broadway New York, N. Y.

Current Assignments of A.S.C. Members



Major film productions in which members of the American Society of Cinematographers were engaged as directors of photography during the past month.

Columbia

- **LESTER WHITE**, "Gasoline Alley," with Sooty Becken, James Ligon, Jack Hammer, Don Decker and Dick Wood. Edward Bernds, director.
- **CHARLES LINDSON**, "Mask Of The Avenger," with Julia Dwyer, Jody Lawrence, Anthony Quinn, and Eugene Iglesias. Irving Pichel, director.
- **BENNETT GUSTEY**, "Two Of A Kind," with Loretta Scott, Jack Jones, Terry Moore and Alexander Kerr. Henry Lewis, director.
- **LESTER WHITE**, "Bathhouse Island," with Joe Hall, Marie Windsor and Russa Vassari. Lew Landers, director.

Eagle-Lion

- **BLAKE DYER**, "Kismet Patrol," (Jack Schwartz Prod.) with Richard Emery, Brown Fong, Terry Dunn and Al Egan. Max Norick, director.
- **BLAKE DYER**, "Carmel Queen," with Marie Hall, Debra Scott, Douglas Wood, Edward Clark, Robert Gladstone and Wm. Fawcett. Robert Talbot, director.

Independent

- **DEANNE LAFELA**, "The Wolf" (Rory M. Pugh Prod.), with Richard Kober, Barry Kelley, Charles Lathan, Henry Morgan, Lee C. Pugh and Russell Rouse. Directors.
- **ERNEST MELLER**, "Brandt Quinn," with Barbara Britton, Willard Parker, Phil Reed, Barton McKane and Anna Demetrio. William Berke, director.
- **JACK GREENBERG**, "The Deluge's Last Raid," with Frances Foster, Jim Davis, Jim Eyckman, Monte Egan and Virginia Gray. Sam Newfield, director.

M-G-M

- **ROBERT SWINNEY** and **WILLIAM SCALL**, "Quo Vadis," (Shooting In Italy) with Robert Taylor, Deborah Kerr, Mervyn LeRoy, director.
- **HAL ROSEN**, "Red Sails of Courage," with Audre Murphy, Bill Maudlin, Royal Dano, Douglas Sirk and Arthur Hanesworth. John Huxton, director.
- **JOSEPH KUTNER**, "The Great Catnip," with Merle Leroy, Ann Rhye, Dorothy Kistner, Janelle Novak, Blanche Thebom, Teresa Celli, Ludwig Donath, Carl Swenson Reed and Norma Paine. Richard Thorpe, director.
- **RAY JUNE**, "Smoky Struggle," with David Evans, Arthur Hays, Barry Sullivan, MacDonald MacDonald, Paula Raymond, Lon Chaney and Monica Lewis. Gerald Mayer, director.
- **PAUL C. YOUNG**, "On Fire Smoke," with Van Johnson, Walter Anderson and Richard Anderson. Robert David, director.
- **JOHN ALTON**, "Father's Little Dividend," with Spessard Tyron, Jose Benavente, Elizabeth Taylor, Don Taylor, Billie Burke and Michael O'Hara. Vincent Menefee, director.
- **ALVIN GILK**, "Excuse My Dan" (Technicolor), with Red Skelton, Sally Forrest,

MacDonald Carey, William Demarest and Mervyn Leroy.

Monogram

- **OL. WARRINGTON**, "Hot Blood," with Bill Williams, Jack High and Audrey Long. Len Landers, director.
- **MARRY SCHWARTZ**, "Cavally Scout," with Red Cameron, Audrey Long, Loretta Schlander, director.
- **KARL STERN**, "Father's Wild Chase," with Raymond Walburn, Gary Gray, Barbara Brown, Miltie McClure, and Fred Libby. Herbert J. Leeds, director.
- **GILBERT WILKINSON**, "Colorado Ambush," with Johnny Mack Brown and Lois Hall. Lewis Collins, director.
- **WILLIAM SCHENK**, "Tired Daze," with Lela Albright, Richard Widmark and Alan Hale, Jr. Frank McDonald, director.

Paramount

- **RAY BRIDGEMAN**, "Wagon," (Technicolor) (Nat Jack Prod.) with Edmund Dwyer, Dean Jagger, Fritzie Tucker and Henry Carey. J. Edgar Rubin, director.
- **VICTOR MAYER**, "Cavale," with Laurence Oliver, Jennifer Jones, Eddie Albert, Ruth Warrick, Basil Raymond and Mervyn Murphy. William Wyler, director.
- **LOYAL GRAY**, "The Last Outpost" (Pier-Thomas) (Technicolor), with Ronald Reagan, Rhonda Fleming, Scott Bennett, Bill Williams, Noah Berry, Jr. and Peter Hanson. Lewis Foster, director.

R.K.O.

- **GEORGE CRISTOF**, "The Green Wagon," with Dana Anderson, Claude Rains, Carla Balades, Philip Dorn and Eric Felday. Alfred Werker, director.
- **HARRY WILD**, "Micro," with Robert Montgomery, Jane Russell, William Bredette and Thomas Gomez. Josef von Sternberg, director.
- **NICHOLAS MOSCOWITZ**, "Roadblock," with Charles McGraw, Joan Dixon, Louis Hédit, Lowell Gilmore and Janet Scott. Harold Daniels, director.
- **KARL STERN**, "Tender's Faith" (Sol Lesser Prod.) with Les Baxter, George Macdonald, Gloria Anderson, Douglas Fowley and Dorothy Dandridge. Eytan Haskin, director.

20th Century Fox

- **LUCIEN BALLARD**, "House On Telegraph Hill," with Yvonne De Carlo, William Lundigan, Robert Beahm and Fay Bainter. Robert Woot, director.
- **JOHN LAFORCE**, "The Scarlet Pimpernel," with Linda Darnell, Charles Boyer, Francine Royce, Constance Smith, Michael Rennie and Judith Evelyn. Otto Preminger, director.
- **JACK GREENBERG**, "The Sword of Moses Crism," (E. L. Alperman Prod.) (Technicolor) with George Montgomery, Paula Godley, Barry Kruger, Chas. Brown and Agnes Moorehead. Vincent Menefee, director.
- **LAURENCE**, "On The Border," (Technicolor) with Danny Kaye, Gene Tierney,

Cosmo, Robert, Marcel Dalna, and Ann

- **CLAUDE WALKER**, director.
- **FRANK FLAHERTY**, "Ladies Of The Damned," (Shooting in Germany) with Gary Merrill, Richard Benedict and Oscar Werner. Alvin Lusk, director.
- **LES TERRY**, "Follow The Sun," with Glenn Ford, Anne Banner, Debra O'Kerle, and Jane Haver. Sidney LaSalle, director.
- **MICHAEL KRAMER**, "I Can Get It For You Wholesale," with Don Dealey, Susan Hayward, Duane King, Steve Garay and Yoko Cavanaugh. Michael Glick, director.
- **HARRY JACKSON**, "Take Care Of My Little Girl" (Technicolor), with Jeanne Crain, Jess James, Dale Robertson, Mimi Gurnat, Helen Westbrook, Betty Lynn and Jeffery Hunter. Jean Nevelson, director.

United Artists

- **GUY ROSS**, "Queen For A Day," (Robert Seligman Prod.) with Phyllis Avery, Doris McGavin, Rudy Lee, Adam Williams, Tracy Roberts. Arthur Lubin, director.

Universal-International

- **WILLIAM DANIELS**, "Eight Out," with Arthur Kennedy, Peggy Dow, James Edwards and Foch Haden. Mark Robson, director.
- **MICHAEL CURTIZ**, "Prisoner Of War," with Mark Stevens, Robert Douglas, Alan Reed, Guy Young and Judy St. George. George Herman, director.
- **CARL GUTTER**, "Bedtime For Beano," with Ronald Reagan, Dana Lynn, Walter Slezak, Herbert Hays, and Lucille Barkley. Fredrick de Cordova, director.
- **JAMES GLASSER**, "The Prince Who Was A Thief," (Technicolor) with Tony Curtis, Pipit Larkin, Jeff Cory and Pippin Kroll. Rudi Mark, director.
- **RUSSELL MERRY**, "Up Front," with David Wayne, Tom Emml, Jeffery Lynn, Richard Egan, Dennis Dugan and Ruth Cavell. Alexander Hall, director.
- **GEORGE ROBINSON**, "Abbott & Costello Meet The Invisible Man," with Bud Abbott, Lou Costello, Mervyn Gelfand, Adele Jergens, Arthur Franz, Wm. Frawley and Greta Mair. Charles Lamont, director.
- **CLEOPATRA STONE**, "Am Cade," with Stephen McNally, Gail Russell, Richard Long, Alex Ford, Charles Drake, James Best, Rick Hudson, and Russell Dennis. Joseph Perry, director.
- **CHARLES ROYCE**, "Deserter's Revenge" (Technicolor), with Royce, Marshall, Cyd Charisse, Arthur King, Gilbert Roland, J. Carol Nash, George Tohan, Annome Moore and Bridget Cass. Hugo Fregonese, director.

Warner Brothers

- **HARRY STRANDLING**, "Ringside Nosed Dore," (Chas. K. Feldman Group Prod.) with Victor Lough, Martin Brande, Kim Hunter. Ila Kassa, director.
- **ERNEST HALLER**, "Joy Therpe, All-American," with Ruth Lister-Jones, Charles Laughton, Phyllis Thaxter, Steve Cochran. Michael Curtis, director.
- **WALTER CLARK**, "Lullaby Of Broadway," with Doris Day, Gene Nelson, Betty de Wills, E. Z. Salkin and Ann Telford. David Butler, director.
- **TO. MCCOY**, "Goodbye My Fancy," with Joan Crawford, Frank Lovejoy, Jess Ardren, and Virginia Gibson. Vincent Sherman, director.
- **JO. HAZEN**, "The Traveller," with Kirk Douglas, Virginia Mayo and Walter Brennan. Raoul Walsh, director.



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